REMARKS

First, Applicant refers the Examiner to the Information Disclosure Statement filed concurrently herewith and listing, and providing a copy of, EP-A-0711658 which is already cited and distinguished in Applicant's specification at page 1, second paragraph.

As described in Applicant's specification, EP '658 is directed to the use of an "injection **compression** mould", but, as opposed to the process of the present invention, the skin is made from a thermoplastic material, more particularly of PVC, instead of from a thermosetting material.

Applicant notes that the cited Jourquin '996 is the U.S. counterpart of EP '411 which already is cited and distinguished in Applicant's specification at page 1, beginning at line 23, and which is cited in only Category A in the International Search Report.

Applicant requests the Examiner to reconsider and withdraw the rejection of claims 1-20 under 35 U.S.C. § 112, second paragraph, in view of the above claim amendments which correct each and every one of the informalties noted by the Examiner.

With reference to page 6 of the Office Action, Applicant notes the allowability of dependent claims 4 (4/1), 5 (5/1), 6 (6/4) and 7 (7/4). These claims have been rewritten as new claims 27, 28, 29 and 30, respectively, and, therefore, now should be **allowed**.

Applicant respectfully traverses the rejection of claims 1-3 and 8-16 under 35 U.S.C. § 103(a) as being unpatentable (obvious) over Gruenwald '272 in view of Jourquin '996 (cited as WO '237 (EP 064211) in only Category A in the International Search Report).

Before addressing the prior art rejections, Applicant presents the following explanation of the above amended claims and new claims.

As already stated, new claims 27-30 correspond to the rewritten (allowable) claims 4-7, respectively.

Amended claim 1 now recites that the thermoplastic material for the carrier is applied in molten state in the mould. Support for this amendment can be found in originally filed claims 4, 5 and 8.

Amended claim 3 now recites that the preformed skin is made starting from a reaction mixture. Support for this feature can be found, for example, on p. 6, l. 19 - p. 7, l. 10.

New claims 21 and 22 are like claims 6 and 7, but dependent on claim 5 instead.

New claims 23 and 24 have been added to recapture the "preferably" limitation deleted from claim 6.

Claims 9 and 18 have been amended to delete the language to which the Examiner objected.

The scope of claim 25 is almost the same as the scope of claim 16 except that polypropylene (PP) is omitted as one of the possible thermoplastic materials for the carrier. This amendment is based on specification p. 7, l. 22 - 26 disclosing the drawback of PP that an additional primer or adhesive layer is necessary to achieve the required adhesion. Claim 25 thus contains an important difference with respect to the European patent application No. 0 711 658 which is described as closest prior art in the specification, and wherein the carrier is always made of PP: by using the thermoplastic materials defined in claim 25, no primer or adhesive layer is

required to achieve a good adhesion between the skin (or the intermediate foam backing layer) and the thermoplastic carrier.

Applicant respectfully traverses the rejection of claims 1-3 and 8-16 under 35 U.S.C. § 103(a) as being obvious over Gruenwald in view of Jourquin. In support of this rejection, the Examiner states that the claimed method would be known from Gruenwald, while the applied materials would be known from Jourquin. Moreover, for the skilled person it would have been obvious to use the materials set forth in Jourquin when performing the process set forth in Gruenwald. However, Applicant respectfully submits that this is clearly **not** the case.

First, Applicant has now limited the scope of claim 1 to recite that the thermoplastic material for the carrier is applied in a molten state in the mould.

This is **not** so in the method of Gruenwald wherein the body or structure of the part is made by loading the mould with a resin charge (after having made the surface layer) and by subsequently heating the mould so that the resin is caused to melt (see c. 3, l. 56 - 65; c. 4, l. 30 - 51; c. 5, l. 28 - 32; and c. 6, l. 16 - 19). Since the resin is caused to melt by the heated mould, it was applied in a non-molten state in the mould. In other parts of Gruenwald, it is even explicitly stated that the resin is loaded in the mould in a non-molten state, more particularly in a powdery state (see c. 4, l. 24 - 25, and c. 7, l. 18 - 24).

An important advantage of the method according to the present invention is that the thermoplastic material for the carrier need not be melted by means of heat applied by the mould through the preformed skin, because the thermoplastic material has already been heated (melted) in advance so that, when moulding the carrier, the skin is subjected to less heat. In this way,

higher pressures can be used for moulding the carrier, thereby enabling moulding of the carrier in a closed mould so that both its front and its back can be produced within small dimensional tolerances. This is very important in case the produced parts are for example car interior trim parts which have to be mounted accurately in the right position in the car body. In the rotational moulding technique disclosed in Gruenwald, the shape and dimensions of the back of the produced parts will vary within larger tolerances.

As to the materials used in Jourquin, the Examiner correctly states that the elastomeric skin is made of a polyurethane material, the foam backing layer of a flexible polyurethane foam material, and the carrier of a polyurethane material (produced using PU systems or SRIM systems). It should be noted however that, in contrast to the present invention, the carrier of Jourquin is **not** made of a thermoplastic material but, instead, of a thermosetting material. As mentioned in claim 1, and as described for example in c. 4, l. 57, to c. 5, l. 7, the rigid carrier is, indeed, produced in the method of Jourquin starting from a "reaction mixture". Such a reaction mixture is cured, i.e. the isocyanate and the polyol components are allowed to react, to produce a thermosetting polyurethane material. The materials disclosed in Jourquin are thus **not the same** as those used in the method according to the present invention.

Since the materials used in the claimed method according to the present invention are different from those used in Jourquin, a skilled person would not arrive at the claimed method when combining the teachings of Gruenwald and Jourquin. Furthermore, a skilled person would never combine both teachings, i.e., he would not use the thermosetting PU materials of Jourquin in the method of Gruenwald, since it is clear that this is not possible at all. Indeed, an essential

feature of the method of Gruenwald is that the different materials have to be molten in order to be able to mould the different layers (see for example claim 1). This is of course not possible with the thermosetting PU materials disclosed in Jourquin. When Gruenwald teaches that other conventional materials can be used in his method, it is clear that these other conventional materials embrace **only thermoplastic** materials, which can be caused to melt, and thus **not** the thermosetting PU materials used in the method of Jourquin.

The Examiner refers to c. 3, l. 11 - 40 of Jourquin where mention is made of the thermoplastic materials PVC and ABS. These thermoplastic materials are, however, **not** used in the method of Jourquin but are described as materials which were used in prior art automotive interior trim parts. In fact, in the prior art, processes were known, i.e., the so-called conventional back foaming processes, wherein a skin material and a rigid carrier are positioned in a mould, and wherein a foamable PU reaction mixture is allowed to foam between the skin material and the carrier. The skin material may be a PU or a PVC material whilst the rigid carrier is for example made of ABS.

An essential novel and unobvious different feature according to the present invention is that the thermoplastic carrier is moulded to the back of the skin. This offers the advantages that:

- the thermoplastic carrier doesn't have to be manufactured in advance;

- the carrier doesn't have to be positioned accurately into the back foaming mould;

- no separate mould is needed for moulding the thermoplastic carrier; and

- if desired, the intermediate foam backing layer between the skin and the carrier can be omitted for example in order to enable thinner trim parts or to reduce the production costs.

A person skilled in the art who would even consider using these materials in the method of Gruenwald would still not arrive at the present invention, since he would use a thermoplastic material not only for the carrier but also for the outer surface layer. In each of the four different methods disclosed in Gruenwald, the material for the outer surface layer is indeed always molten in order to produce the outer layer, even when this material is sprayed (in a solvent) onto the mould surface (see c. 3, l. 37 - 41). Consequently, the rotational moulding method of Gruenwald requires a thermoplastic material for producing the outer surface layer so that a skilled person would not use a thermosetting material for producing the outer surface layer in the method of Gruenwald.

An important advantage of Applicant's claimed method is, however, that by the use of a thermosetting material for the skin, higher temperatures and pressures can be used for moulding the thermoplastic carrier to the back of the skin. This enables the use of moulding techniques different from the rotational moulding techniques of Gruenwald, and also enables the use of other thermoplastic materials for producing the carrier. The method according to the present invention enables more particularly the use of injection pressure moulding, low pressure moulding and injection moulding processes which are claimed in claims 4, 5 and 8, and all of which require the thermoplastic material to be applied in a molten state (as now defined in claim 1) in the mould. When using a thermoplastic material for the skin and when applying the thermoplastic material for the carrier, behind the skin, in a molten state in the mould, it is clear that the thermoplastic material for the carrier should have a lower melting point than the melting point of the skin material. If the skin is, for example, made of PVC, which can be moulded at a

temperature lower than 240°C (see for example, Example 1 of EP-A-0 711 658), the carrier could be made for example of PP (having a melting point of about 190°C) but not of PC, ABS or ABS blends. Indeed, as appears from the examples given in Applicant's specification, these materials require a moulding temperature of, for example, 260 - 270°C. In practice, materials like PC, ABS and ABS blends are, however, preferred in view of their better mechanical properties.

Claim 3 now recites that the preformed skin is made starting from a reaction mixture which is allowed to cure. This feature is not disclosed in Gruenwald.

Applicant disagrees that claim 10 would be obvious from Gruenwald, since the only layer which is sprayed in Gruenwald is the outer surface layer (see c. 3, l. 37 - 55), and it is not seen that Gruenwald discloses or suggests that, "Each subsequent material layer can be applied as the first resin layer" (see p. 4, l. 3 - 4 of the Office Action).

With respect to claim 8, the Examiner refers to the moulding techniques disclosed in Jourquin. However, the moulding technique, wherein the thermoplastic material for the carrier is injected, in a molten state, in the mould, is **not** disclosed in Jourquin. Instead, in the method of Jourquin, the rigid carrier is always made starting from a reaction mixture (which is not a molten material) which is either applied by a spray or by a RIM (Reaction Injection Moulding) process (see c. 4, l. 57 - 65).

Concerning the product claims 17 - 20, Applicant does not agree with the Examiner that the combination of an elastomeric skin made of a thermosetting material and a carrier made of a thermoplastic material which is moulded in molten state to the back of the skin is disclosed by Jourquin. Indeed, as explained already hereinabove, use is made in the method of Jourquin of

only (PU) reaction mixtures to produce thermosetting materials so that the obtained part does not contain a thermoplastic carrier. On the other hand, the prior art trim parts referred to in c. 3, l. 21 - 25 of Jourquin, and comprising a thermoplastic carrier, are made in practice either by gluing the skin onto the carrier or by a back foaming process wherein a foam layer is moulded (according to a RIM process) between the skin and the premanufactured thermoplastic carrier. The thermoplastic carrier is thus not moulded in a molten state to the back of the skin which is clearly visible in the produced part. As claimed in claim 20 the thermoplastic carrier has indeed a coarse surface when being moulded in molten state to the back of the skin whereas the known moulded thermoplastic carriers, used in the prior art back foaming process, have a smooth surface.

Applicant notes that the Examiner refers to Figure 1 of Jourquin to demonstrate that the carrier (8) has also a coarse surface on its side directed toward the skin (5). In the method of Jourquin illustrated in Figure 1, the rigid carrier is, however, produced by a RIM process, starting from a PU reaction mixture (see c. 4, l. 57 - 60), so that an essential difference with the parts according to the invention is that the part produced in the method illustrated in Figure 1 comprises a thermosetting instead of a thermoplastic carrier. Drawbacks of such a thermosetting carrier are described on p. 2, l. 1 - 6 of the specification.

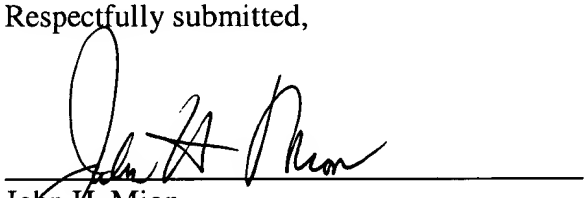
In summary, Applicant has shown above that none of the claims would have been obvious from the prior art cited by the Examiner, whereby Applicant respectfully requests the Examiner to reconsider and withdraw all objections and rejections, and to find the application to be in condition for allowance with all of claims 1-30; however, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully

requested to **call the undersigned attorney** to discuss any unresolved issues and to expedite the disposition of the application.

Filed concurrently herewith is an Excess Claim Fee Payment Letter for twelve (12) excess total claims and one (1) excess independent claim which are generated by this Amendment.

Also filed concurrently herewith is a Petition (with fee) for an Extension of Time of Three Months. Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this application, and any required fee for such extension is to be charged to Deposit Account No. 19-4880. The Commissioner is also authorized to charge any additional fees under 37 C.F.R. § 1.16 and/or § 1.17 necessary to keep this application pending in the Patent and Trademark Office or credit any overpayment to said Deposit Account No. 19-4880.

Respectfully submitted,



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Date: October 22, 2003